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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/822,060

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Eric R. Blomiley

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EXAMINER

MOORE, KARLA A

ART UNIT

PAPER NUMBER

1763

MAIL DATE

DELIVERY MODE

09/25/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/822,060	BLOMILEY ET AL.	
	Examiner	Art Unit	
	Karla Moore	1763	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 68-72 and 74-78 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 68-72 and 74-78 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>0707</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 68-72 and 74-78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) (Figures 1-4 and paragraphs 2-9 of specification) in view of U.S. Patent No. 5,467,259 to Hume et al.

4. Regarding claim 68, AAPA discloses a semiconductor fabrication apparatus substantially as claimed and comprising: a plurality of lamps (e.g. Figure 3, 18 and 22) positioned proximate a substrate; and a plurality of reflectors (30) associated with the

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lamps, individual ones of the reflectors being associated with individual ones of the lamps.

5. However, AAPA fails to teach the reflectors having a rugged, reflective surface.

6. Hume et al. teach providing a lamp with a rugged (i.e. multi-faceted), reflective surface for the purpose of designing a light source capable of directing light precisely, permitting highlighting and profiling and a well controlled beam of light and also for the purpose of allowing most of the heat from the light to pass backwards through the reflector whilst directing the beam forwards (column 1, rows 9-12 and column 2, rows 3-14).

7. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to have provided reflectors having a rugged, reflective surface in AAPA in order to design a light source capable of directing light precisely, permitting highlighting and profiling and a well controlled beam of light and also in order to allow most of the heat from the light to pass backwards through the reflector whilst directing the beam forwards as taught by Hume et al.

8. With respect to claim 69, in Figure 3 of AAPA, the lamps are positioned between the substrate and the reflectors, what would be the rugged reflective surface (as disclosed by Hume et al.) facing the lamps and being concave.

9. With respect to claim 70, in Figure 3 of AAPA, the lamps are positioned between the substrate and the reflectors, the surface of the reflectors complimenting the surface of the lamps.

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10. With respect to claim 71, in Figure 3 of AAPA, the lamps have a convex surface and the reflectors have a concave surface.

11. With respect to claims 72 and 74, Hume et al. teach providing the rugged reflective surface of the reflectors as a repeating honeycomb pattern. See Figures 1-3 and column 2, rows 3-14.

12. With respect to claim 75, in Figure 3 of AAPA, at least four lamps are associated with at least four reflectors.

13. With respect to claim 76, in Figure 2 of AAPA, it is disclosed that the plurality of lamps are positioned on opposing sides of the substrate.

14. With respect to claim 77, in Figures 2 and 3 of AAPA, it is disclosed how one opposing side of the substrate can be supported by a susceptor and a portion of the plurality of lamps can be positioned between the susceptor and a portion of the plurality of reflectors.

15. With respect to claim 78, in Figure 3 of AAPA, the plurality of lamps are comprised by both outer (18) and inner (22) lamps.

Response to Arguments

16. Applicant's arguments with respect to claims 68-72 and 74-78 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. German Patent No. DE 297 13 706 U1 and U.S. Patent No. 3,852,588 disclose rugged reflective surfaces, wherein the rugged reflective surface comprises a honeycomb (i.e. hexagonal) patterned surface.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karla Moore whose telephone number is 571.272.1440. The examiner can normally be reached on Monday-Friday, 9:00 am-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on 571.272.1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Karla Moore
Primary Examiner
Art Unit 1763
18 September 2007